

HANATECH

World-Best Heat
Exchanger Plant



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HANATECH is one of the leading manufacturer of heat exchanger industry. We are manufacturing automobile and home appliances. Fin mill, Core builder, Compressor, assembly equipment, automation equipment and contributing greatly to the development of global heat exchanger industry.



GREETING OF CEO

World Best Heat Exchanger Plant



The world's leading manufacturers of heat exchanger equipment for automobile and electronic appliances

HANATECH is One of the world's leading manufacturers of heat exchanger equipment for automobile and electronic appliances and we secure the technology and quality level of the world's highest heat exchanger on the Gwang-Ju head office and R&D center.

Also we are establishing and operating overseas branch in Suzhou, China.

We will try to become a company that is impressed customer by the best quality in the world.

We are exporting equipment to the United States, china and Europe, etc.

Realizing customer impressions through technological innovation

As a company that possesses the world's best heat exchanger equipment manufacturing technology, Our vision is "Become a company that realizes customer impressions through technological innovation" Through the pursuit of more safer and more efficient heat exchanger equipment production technology, We will strive to be a company that impresses customers with the best quality and after service.

We will do our best to become a company that is trusted and reliable by our customers by utilizing the latest equipments combined with superior HANATECH know-how to develop the optimum solution for your unique needs everytime.

Environmentally friendly technology development

Also as global leading company, We will continue to develop technologies for R&D that considers global environment, service to society and enrich human life.

HONG BEOM SEOK

ABOUT COMPANY



Leading manufacturer of heat exchangers in the manufacturing sector and provide high value-added products and services with world-class technology and cost competitiveness

Automobile and home appliances FIN MILL, CORE BUILDER, COMPRESSOR assembly equipment, automation equipment which are pride and growth power of HANATECH.

Company name	HANATECH Co., LTD
CEO	Hong Beom Seok
Foundation date	2013. 5. 14
Main business introduction	Manufacturing heat exchangers equipment (automobile and home appliances FIN MILL, CORE BUILDER, COMPRESSOR assembly equipment, automation equipment etc.)
Company Location	1-24 Jingoksandan, 2Beon-ro, Gwangsan-gu, Gwangju, Korea
E-mail	hanatech@hntcc.com
Site	http://www.hntcc.com

MANAGEMENT PHILOSOPHY AND VISION

Management philosophy



Customer Focused

The customer is a companion to accompany with company
We are trying to become a creator of lead future by active and innovative thinking based on creativity, integrity and harmony.



Creation Techniques

The value of company is the driving force for the company's existence. HANATECH is creating the best technology development and services to improve corporate value.



Respect for human

Human resources are the most important asset of the company and potential of growth. HANATECH Wants to be recognized as a company that gives happiness to customer, shareholder and employee by offering the best products and services.

Core objective



HI-FIVE

It means like as two men raise their arms and clapping each other's palm that we encourage each other to achieve five key objectives of the company and share the pleasures.

HI

As a symbol of pleasure, it means that we encourage each other to achieve five key objectives of the company.

FIVE

It means that we are going to achieve five key objectives.

High Technology

Maximize productivity through the innovative and new technology

High Quality

Being recognized as the highest quality in heat exchanger industry

High System

Building a stable and efficient system and Substantial management

High Human Resource

Training and development of human resource

High Satisfaction

Customer, shareholder and all employee satisfied with HANATECH

THE HISTORY OF COMPANY

We will continuously developed and accompanied with our customer



2017

- 2017.12 Awarded \$ 3 million export tower prize on 54th Trade Day
- 2017.11 Selected as Excellent Employment Company
- 2017.09 Quality management system (ISO: 9001: 2015) certification
- 2017.09 Established sales office in Suzhou, China

2016

- 2016.11 K-STAR venture company by Technology Guaranteed Fund(KIBO)
- 2016.10 Established Suzhou branch in China-Hana automation equipment (Suzhou) company
- 2016.03 Awarded China shanghai Songz Automobile Air Conditioning best partner prize



2015

- 2015.07 Export EVAPORATOR/CONDENSER FULL AUTO ASSEMBLY LINE to shanghai Songz in China
- 2015.05 Relocated expanded Head office (1-24 Jingoksandan, 2Beon-ro, Gwangsan-gu, Gwangju, Korea)
- 2015.04 Venture company registration
- 2015.02 Export EVAPORATOR FULL AUTO ASSEMBLY LINE to Doowon Climate Control Co.,LTD in China



2014

- 2014.12 Export OIL COOLER ASSEMBLY MACHINE to Denso in U.K Established R&D center



2013

- 2013.11 Export HEATER FULL AUTO CORE BUILDER to HVCC factory in Mexico
- 2013.05 HANATECH Co.,LTD establishment(40, cheomdan bencheo 60Beon-ro, Buk-gu, Gwangju, Korea)

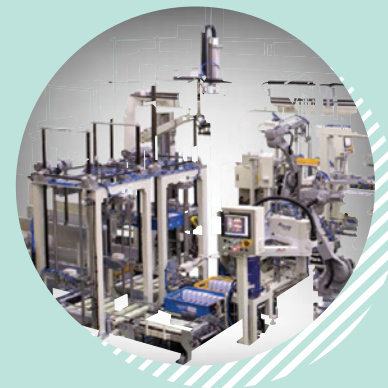
2007

- 2007.08 VISTEON IMPORTANT PARTNER by Visteon in U.S.A



2002

- 2002.02 Developed HCC EVAPORATOR ASSEMBLY LINE



2000

- 2000.08 Developed HCC CONDENSER CORE BUILDER
- 2000.07 ROCKET E&T established Heat exchanger department





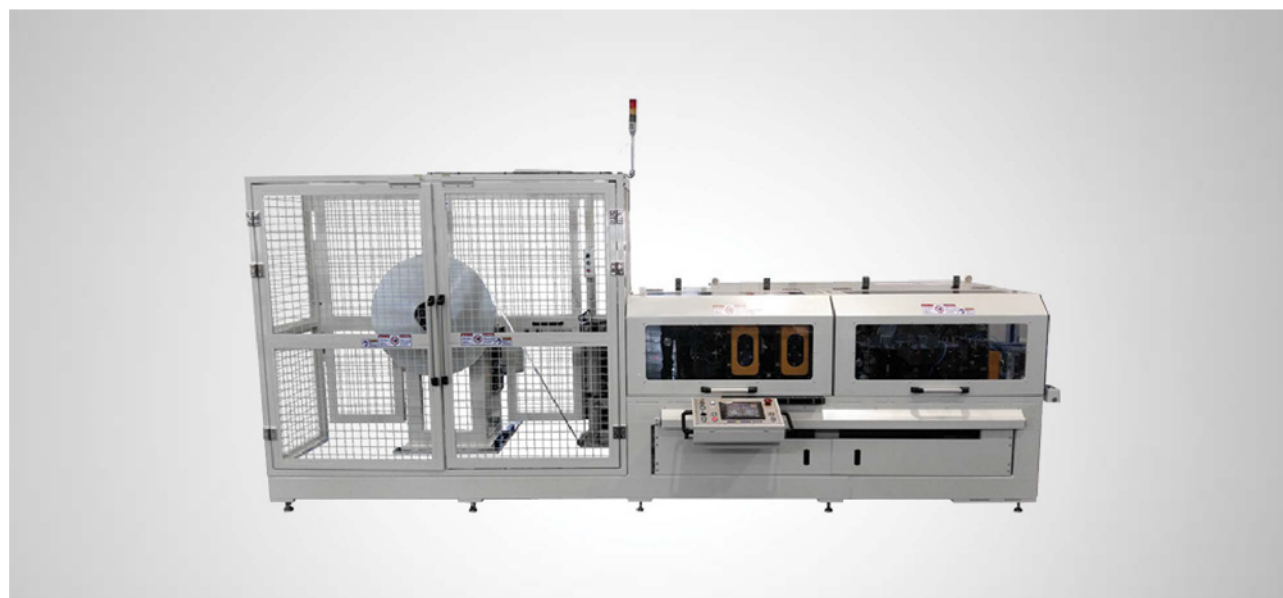
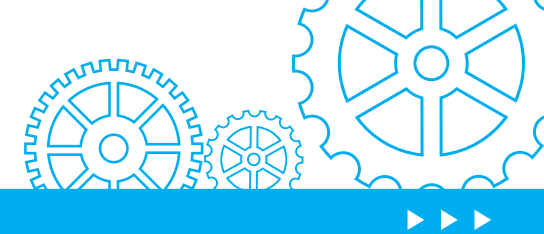
High Speed Model : HNFM-400

- Strip input speed : Max. 400m/min
- Cut-off rate : Max. 140cuts/min
- 3 Packing/Unpacking Zone



Standard Model : HNFM-300

- Strip input speed : Max. 300m/min
- Cut-off rate : Max. 120cuts/min
- 3 Packing/Unpacking Zone



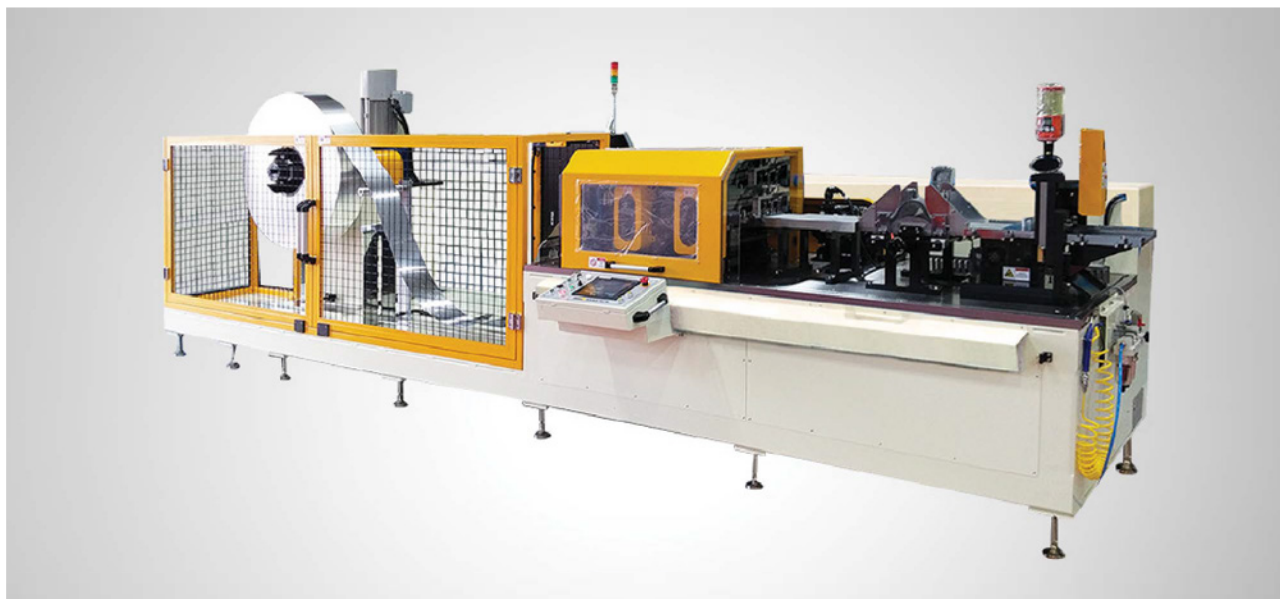
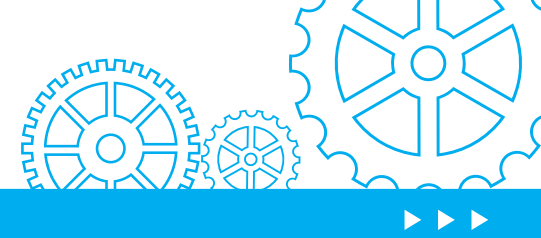
Middle speed Model : HNFM-200

- Strip input speed : Max. 200m/min
- Cut-off rate : Max. 100cuts/min
- 2 Packing/Unpacking Zone



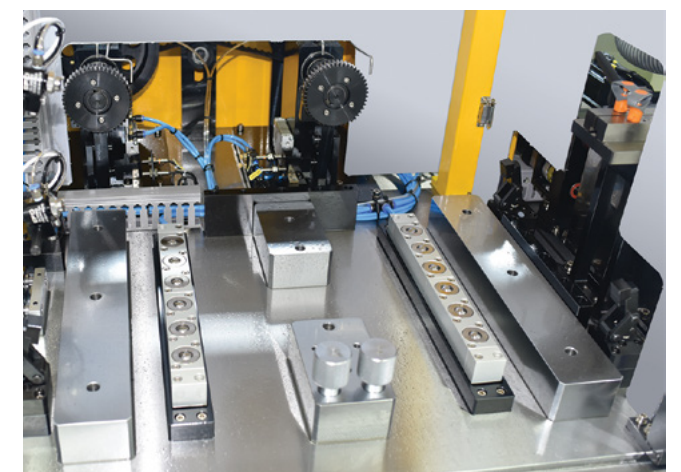
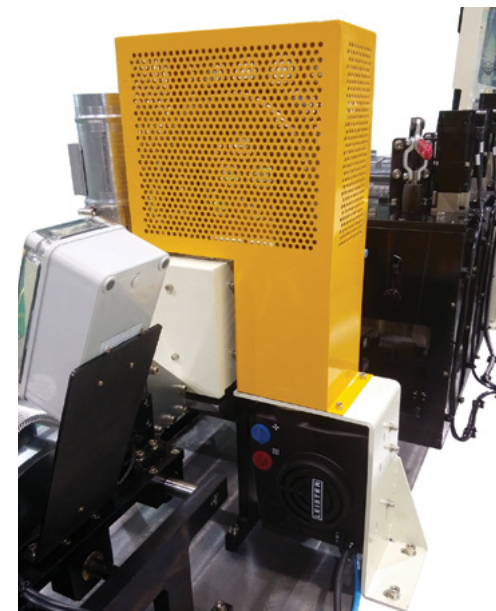
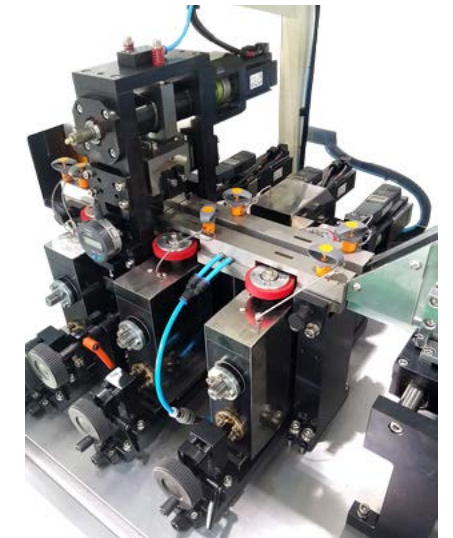
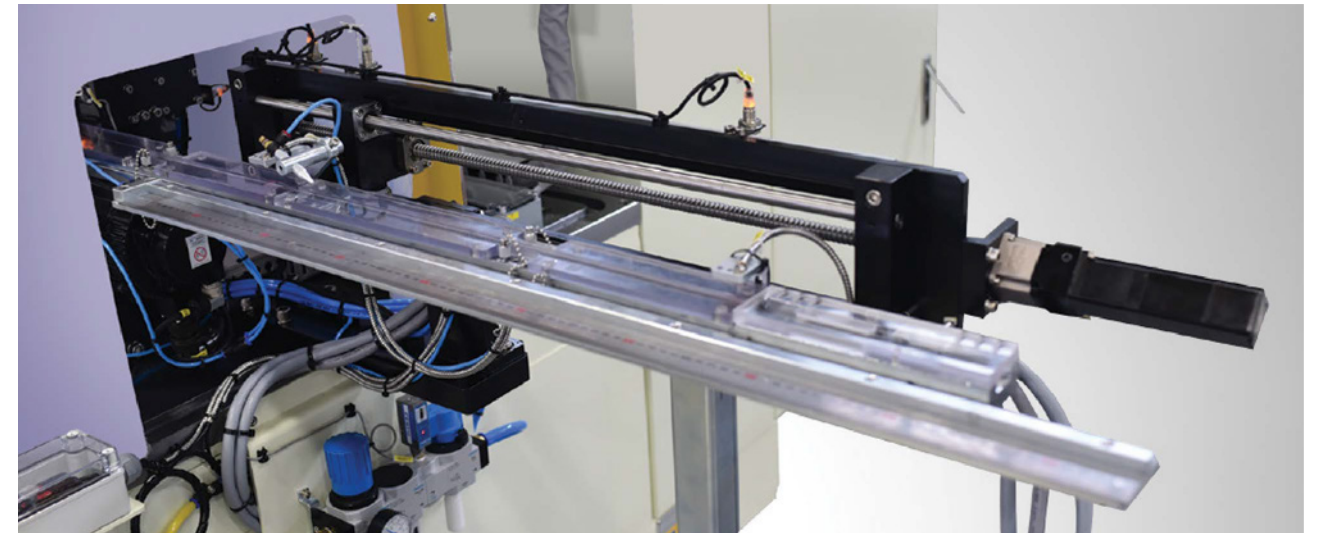
Double Track Model : HNFM-300-2L

- Strip input speed : Max. 300m/min
- Cut-off rate : Max. 100cuts/min
- Double Track fin forming capability



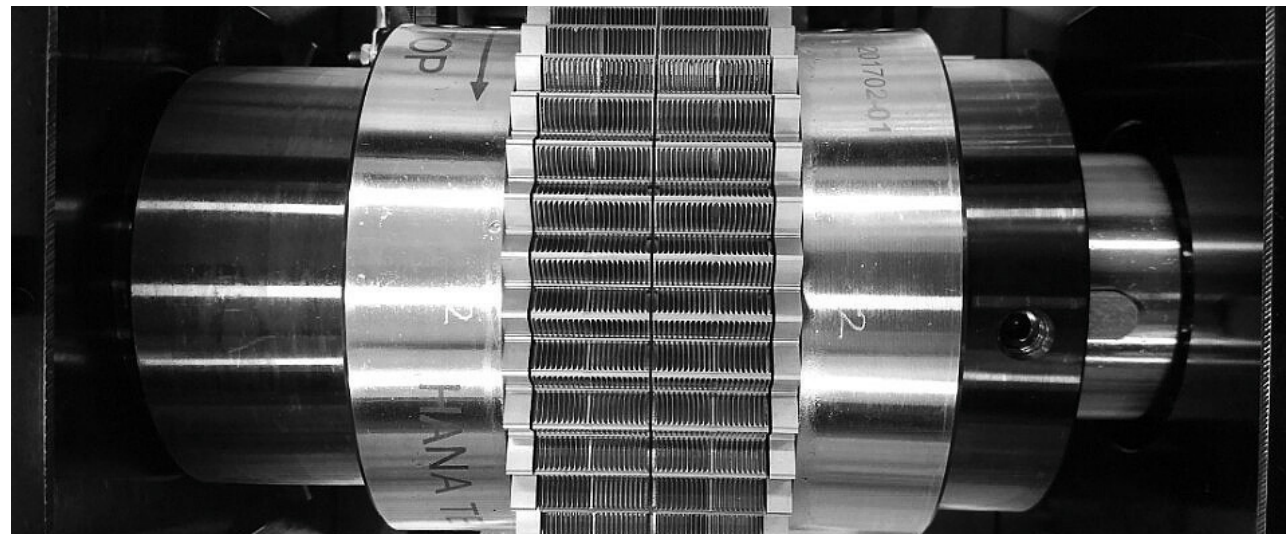
Customized Model : HNFM-WIDE

- Strip input speed and Cut-off rate :
To be discussed depending on fin design
- High speed roll forming of lanced-
offset and parallel louver fins and inner fin



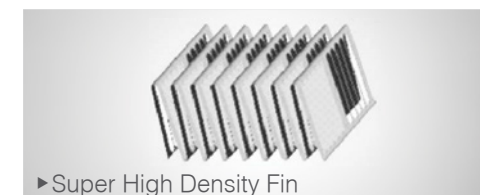
Option Feature Unit and Systems For HNFM Fin Mills

- Inline Fin Length Measuring Unit
- Flattening Unit for Flat Top Fin
- Auto Clamp/Unclamp QDC Unit
- Air-Oil Capturing Unit
- Integrated Thermal Degreasing Unit



Form Roll

- Condenser Form Roll
- Radiator Form Roll
- Evaporator Form Roll
- Heater Form Roll
- Intercooler Inner Form Roll
- Intercooler Outer Form Roll
- Wave Form Roll



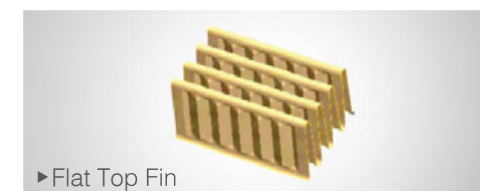
High Efficiency Heat Exchangers

- Condenser Core
- Automotive Radiator
- Heater Core
- Combo-Cooler
- Charge Air Cooler
- Computer Heat-Sink



High Efficiency Heat Exchangers

- Condenser Core
- Automotive Radiator
- Heater Core
- Combo-Cooler
- Charge Air Cooler
- Computer Heat-Sink



High Efficiency Heat Exchangers

- Evaporator



Low Airside pressure Applications

- Evaporator
- Charge Air Cool
- Radiator
- Condenser, Computer Heat Sinks



Dirty or Dusty Environment

- Off-road Vehicles
- Farm Equipment
- Electrical Cooling Towers
- Automotive Seat heaters
- Radiators, Heaters
- Condensers, Evaporators

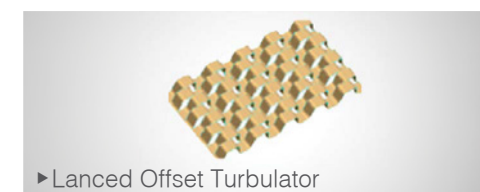


Low Airside pressure Applications

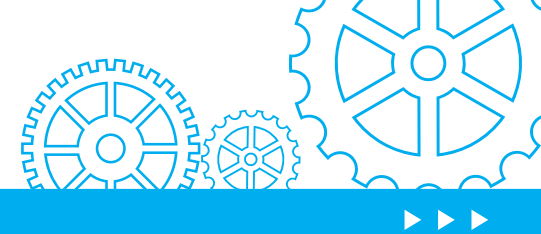
- Evaporator
- Charge Air Cooler
- Radiator
- Condenser, Computer Heat Sinks



- Oil Coolers
- Water Cooler
- Tube Inserts



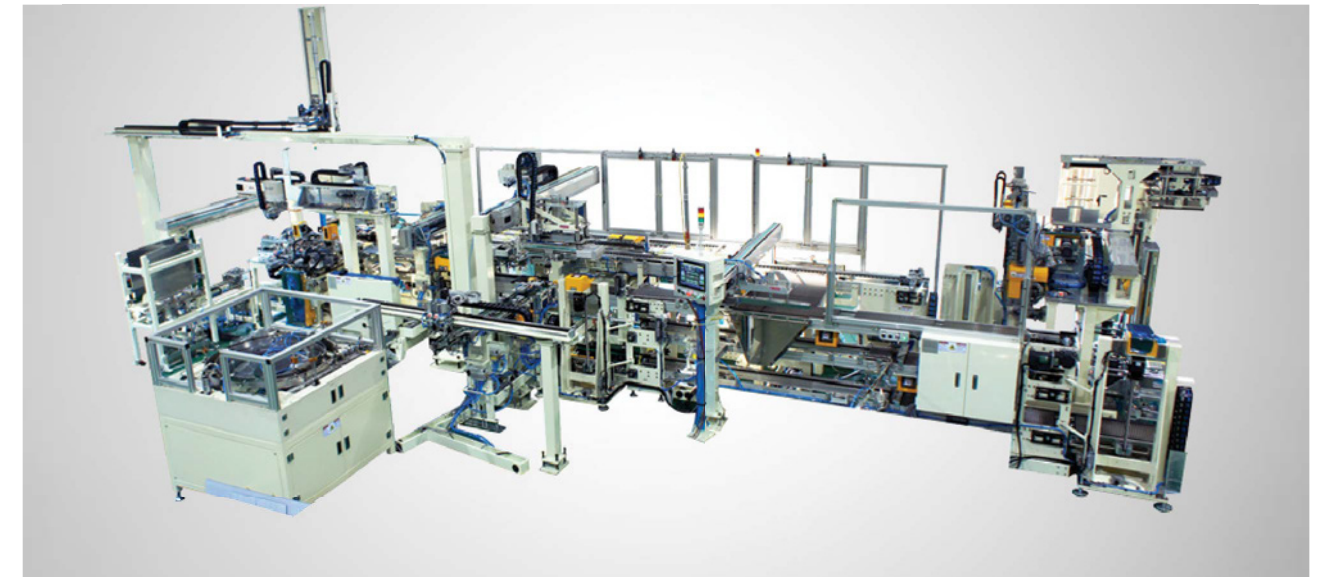
- Oil Coolers
- Water Cooler
- Tube Inserts



>> FULL-AUTO CORE BUILDER Product Common Introduction

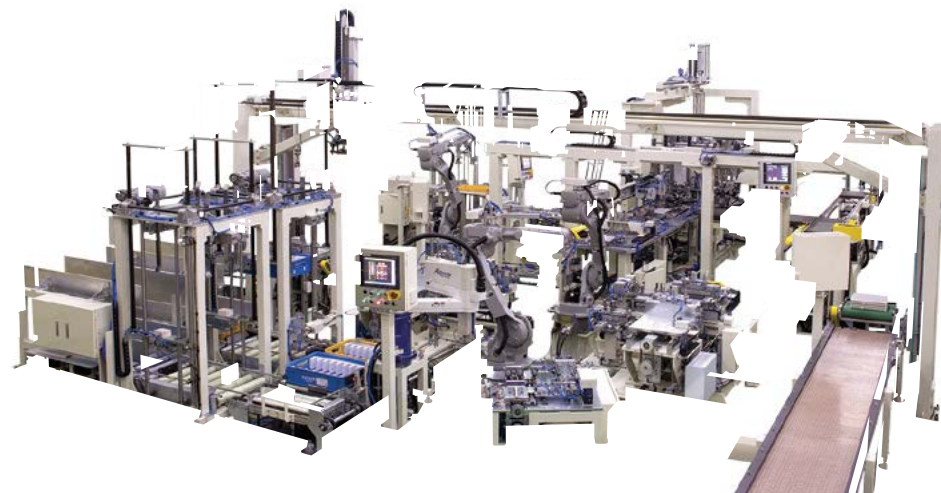
High Speed Full-Auto Core Builder : HNCB-M Series for Mass volume production

- Fin Mill : HNFM-300-2L(Double Track) OR HNFM-400, HNFM-300 Model
- Model : Evaporator Core, Heater Core, Condenser Core, Radiator Core, Intercooler Core Etc.
- Fin Tray & Fin Conveyor
- Side Plate, Header Single item feeding
- Unmanned automation equipment
- Can automatic supply component for operation more than 1 hour
- High production capacity assurance
- Easy and fast model change type
- Production speed
 1. Evaporator Core : Max. 200 Core/hour
 2. Heater Core : Max. 250 Core/hour
 3. Condenser Core : Max. 150 Core/hour
 4. Radiator Core : Max. 150 Core/hour
 5. Intercooler Core : Max. 120 Core/hour



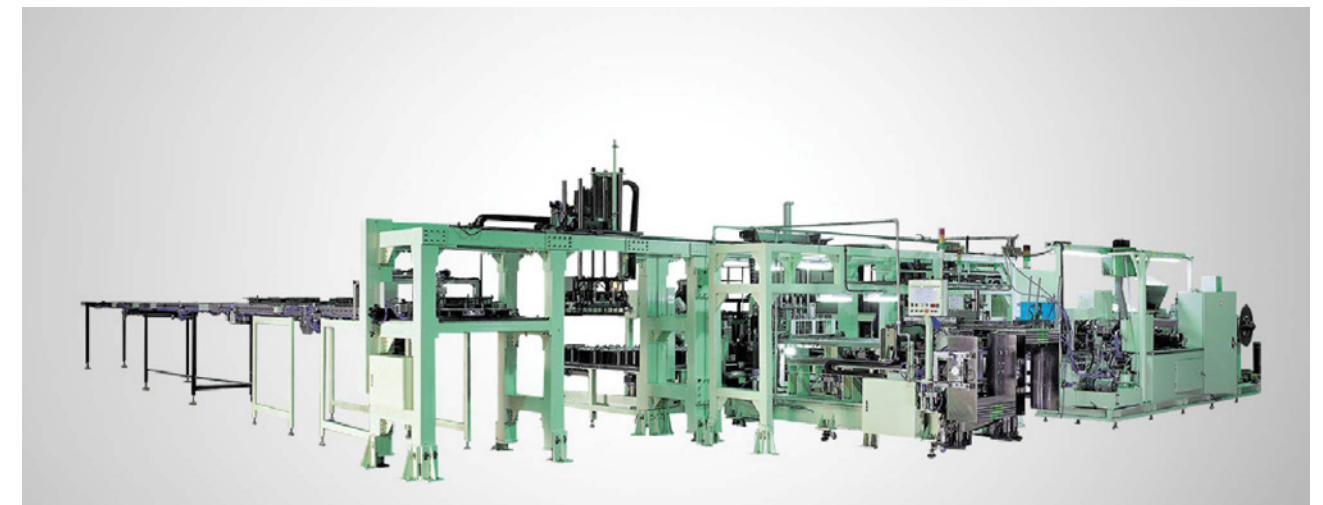
Heater Core Builder

- Standard applied core size
 - Header to Header : 120 ~ 200mm
 - Side to Side : 160 ~ 280mm
- Cycle time : Max. 12sec/1Core



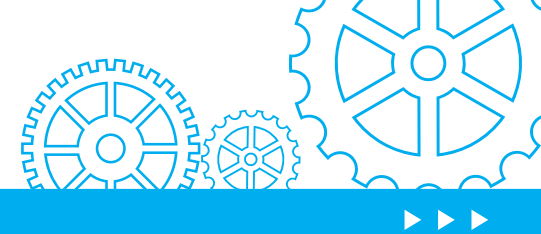
2-Row Evaporator Core Builder

- Standard applied core size
 - Header to Header : 150 ~ 350mm
 - Side to Side : 150 ~ 350mm
- Cycle time : Max. 15sec/1Core



Condenser Core Builder

- Standard applied core size
 - Header to Header : 400 ~ 750mm
 - Side to Side : 350 ~ 600mm
- Cycle time : Max. 20sec/1Core

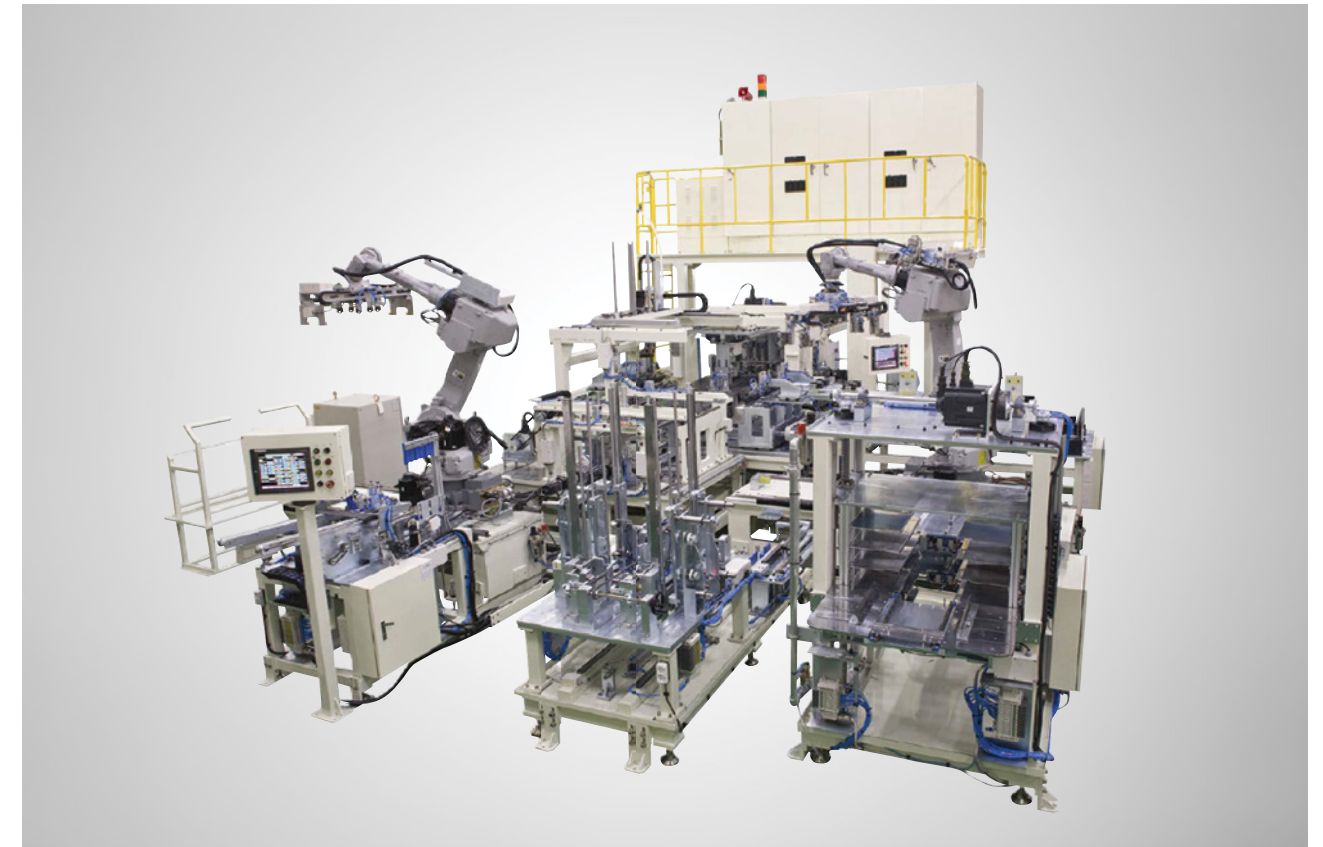


>> FULL-AUTO CORE BUILDER Product Common Introduction

Full-Auto Core Builder

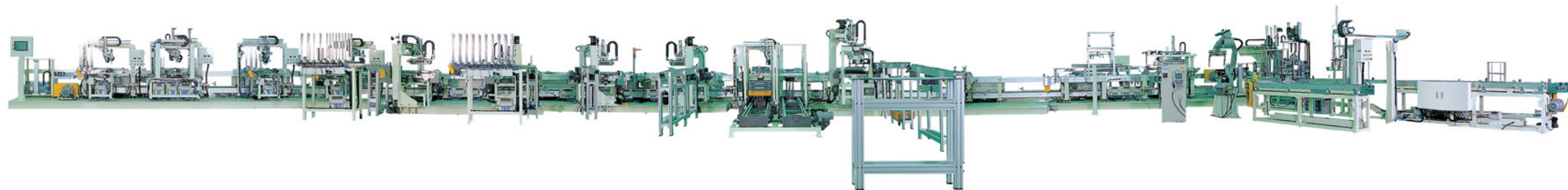
: HNCCB-L Series for lots of volume production

- Fin Mill: HNFM-400, HNFM-300 Model
- Model : Evaporator Core, Heater Core, Condenser Core, Radiator Core, Intercooler Core Etc.
- Fin Tray & Fin Conveyor
- Side Plate, Header Single item feeding
- Unmanned automation equipment
- Can automatic supply component for operation more than 1 hour
- High production capacity assurance
- Easy and fast model change type
- Production speed
 1. Evaporator Core : Max. 120 Core/hour
 2. Heater Core : Max. 170 Core/hour
 3. Condenser Core : Max. 100 Core/hour
 4. Radiator Core : Max. 100 Core/hour
 5. Intercooler Core : Max. 75 Core/hour



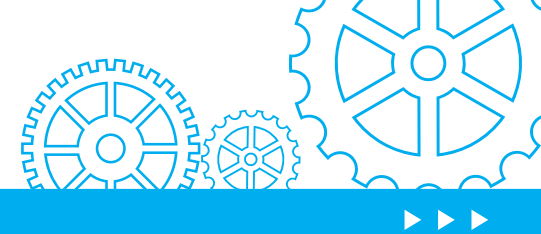
Radiator Core Builder

- Standard applied core size
 - Header to Header : 400 ~ 750mm
 - Side to Side : 350 ~ 600mm
- Cycle time : Max. 20sec/1Core



Laminated Evaporator Assembly Line

- Standard applied core size
 - Header to Header : 150 ~ 350mm
 - Side to Side : 150 ~ 350mm
- Cycle time : Max. 15sec/1Core



>> SEMI-AUTO CORE BUILDER Product Common Introduction

Semi-Auto Core Builder : HNCB-M Series for Middle volume production

- Fin Mill : HNFM-400, HNFM-300 Model
- Model : Evaporator Core, Heater Core, Condenser Core, Radiator Core, Intercooler Core Etc.
- Fin Mill integrated Core Builder for direct fin insertion
- Option Unit :
 1. Automatic Fixture Unit
 2. Automatic Supply component (Slide Plate, Side Bar, Header, etc.)
- Production speed
 1. Evaporator Core : Max. 70 Core/hour
 2. Heater Core : Max. 95 Core/hour
 3. Condenser Core : Max. 60 Core/hour
 4. Radiator Core : Max. 45 Core/hour
 5. Intercooler Core : Max. 45 Core/hour



COND. & RAD. (Compatiable) CORE BUILDER

- Standard applied core size
 - Header to Header : 400 ~ 750mm
 - Side to Side : 350 ~ 600mm
- Cycle time : Max. 45sec/1Core



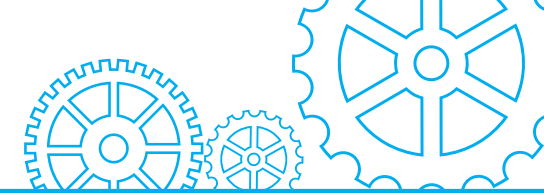
HTR. 2-Station Core Builder

- Operate assembly station in two places
- Standard applied core size
 - Header to Header : 120 ~ 200mm
 - Side to Side : 160 ~ 280mm
- Cycle time : Max. 40sec/2Core



Intercooler Core Builder

- Standard applied core size
 - Header to Header : 550 ~ 750mm
 - Side to Side : 100 ~ 200mm
- Cycle time : Max. 45sec/1Core

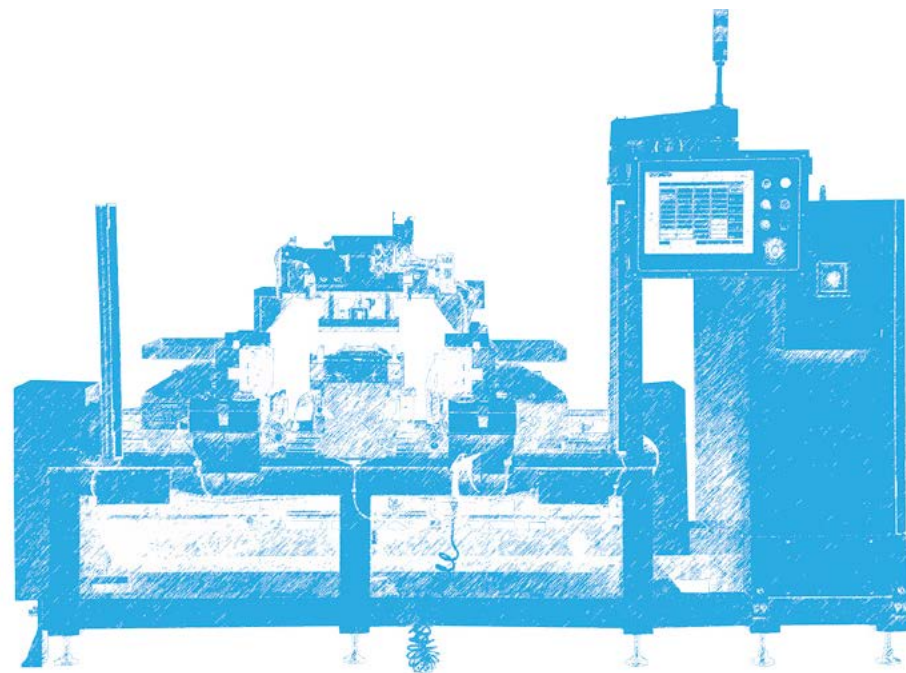


>> MANUAL CORE BUILDER Product Common Introduction

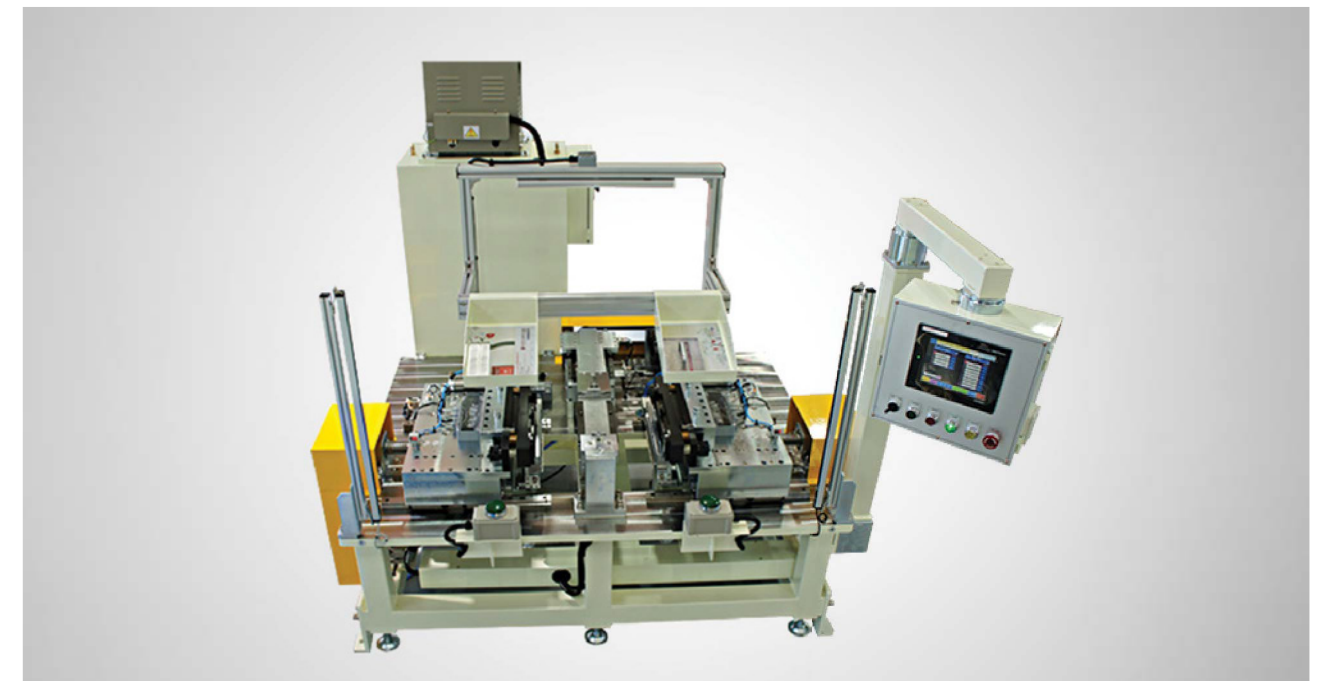
Manual Core Builder

: HNCB-S Series for small volume production

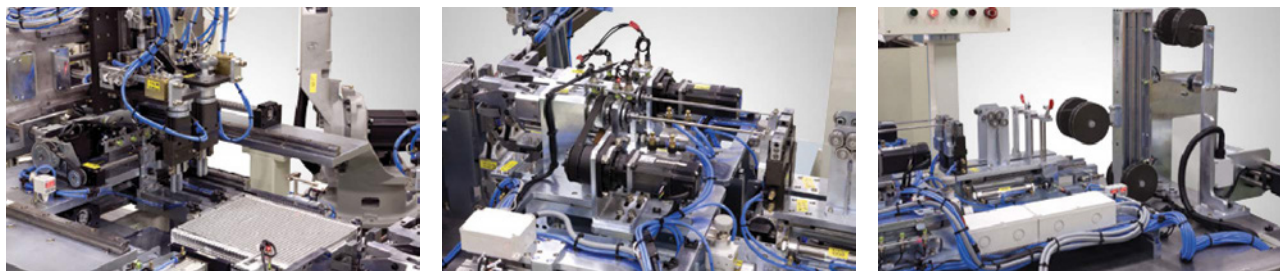
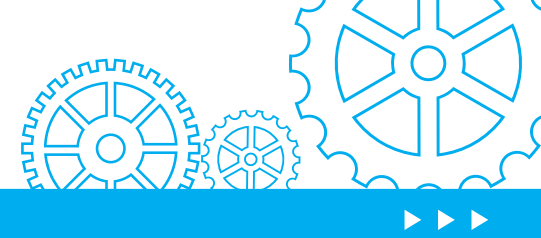
- Fin Mill : HNFM-300, HNFM-200 Model
- Model : Evaporator Core, Heater Core, Condenser Core, Radiator Core, Intercooler Core Etc.
- Fin, Tube, Side Plate, Header etc Manual supply
- Production speed
 1. Evaporator Core : Max. 45 Core/hour
 2. Heater Core : Max. 56 Core/hour
 3. Condenser Core : Max. 40 Core/hour
 4. Radiator Core : Max. 40 Core/hour
 5. Intercooler Core : Max. 45 Core/hour



Intercooler Core Builder

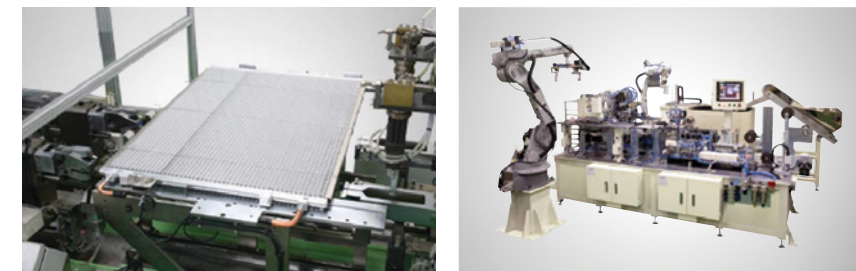


Heater Core Builder



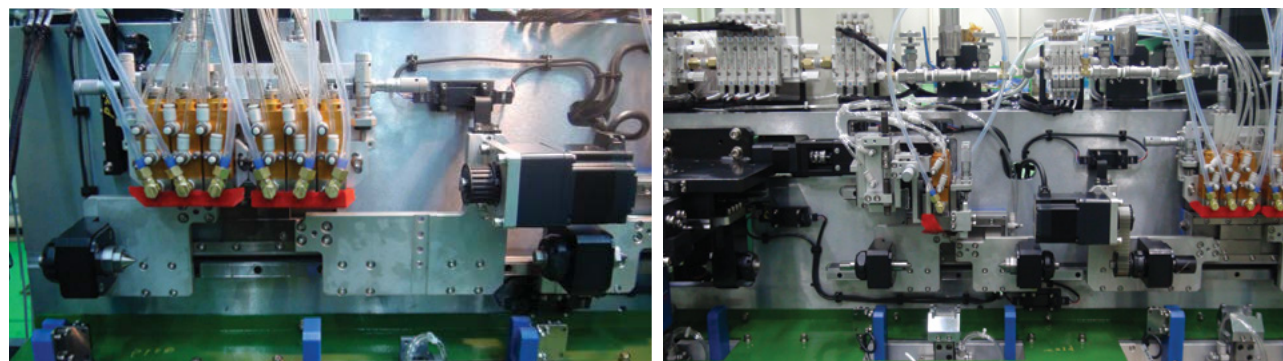
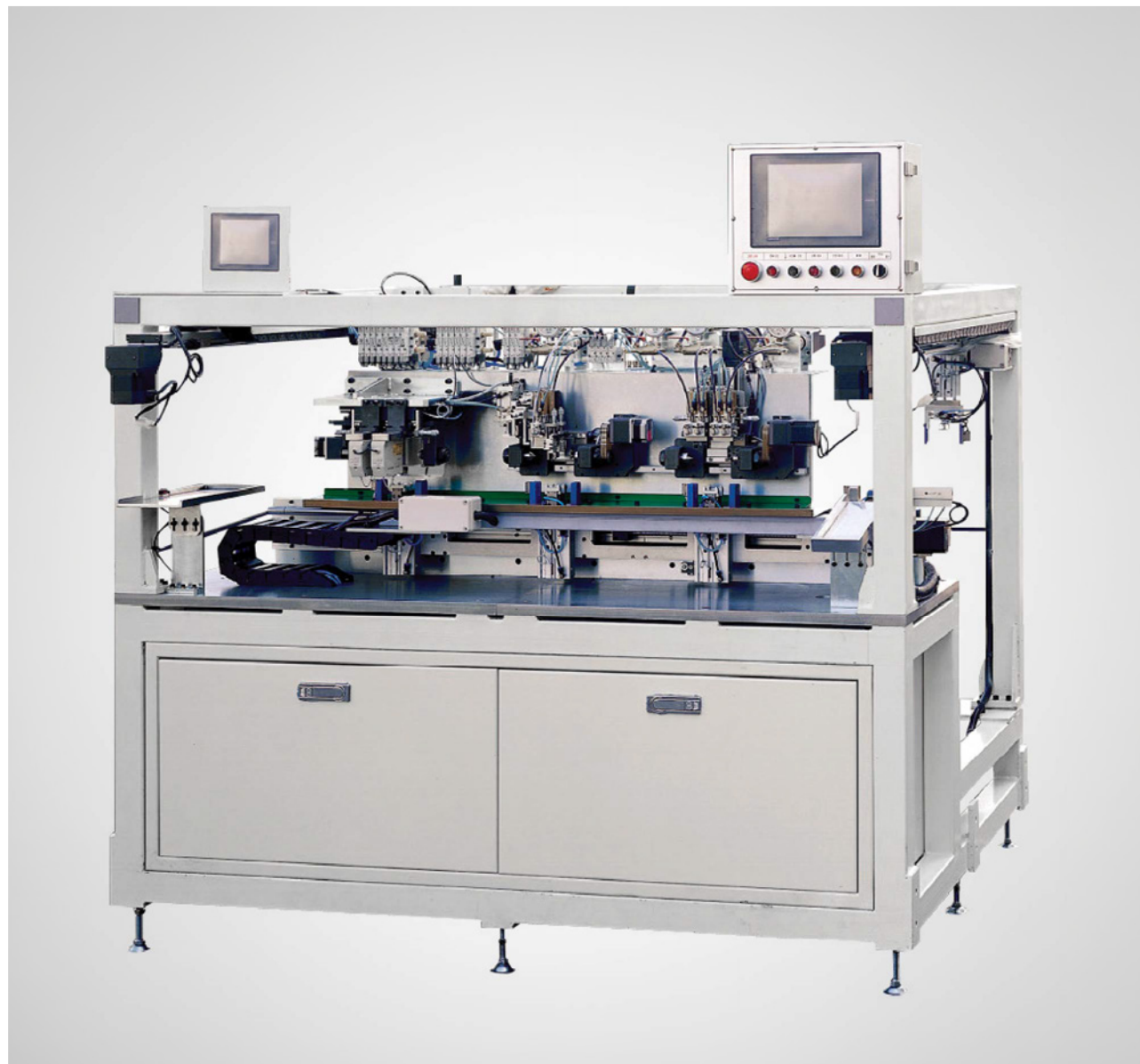
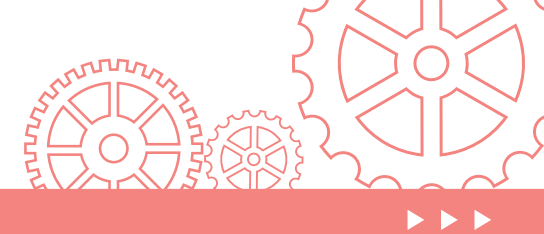
2-HEAD WIRE BANDER

- Brazing jig & Fixture No expense
- Furnace Increase in efficiency
- Brazing Quality improvement



3-HEAD WIRE BANDER

- Brazing jig & Fixture No expense
- Furnace Increase in efficiency
- Brazing Quality improvement



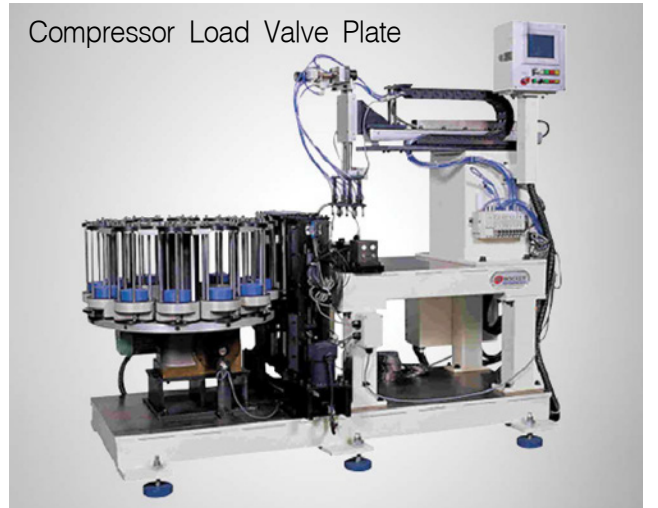
Piston Teflon Coating Machine_Dispenser Type

- Cycle Time : Less 8.0 sec/1Piston
- Teflon coating compound and discharge the equipment which applies in compressor piston major diameter and the wing department.

Compressor Press R coil



Compressor Load Valve Plate



Compressor Torque Nut



Compressor Piston

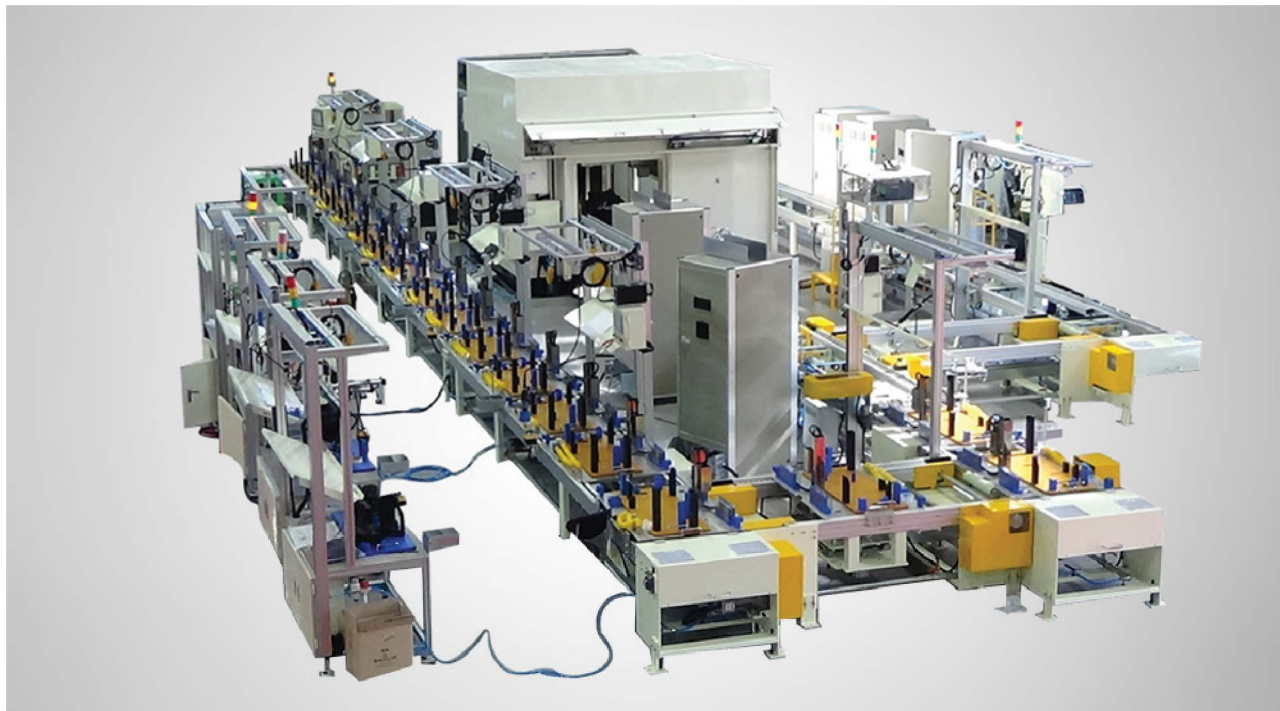


Compressor Load Retainer Ring



Compressor Assembly Line

- Cycle Time : 9 sec/1Unit
- Air conditioner compressor assembly line is composed of various unit.



H-VAC Module Auto Assembly Line

- Cycle Time : 25 sec/1core
- The equipment which assembles a heater unit and evaporator unit.



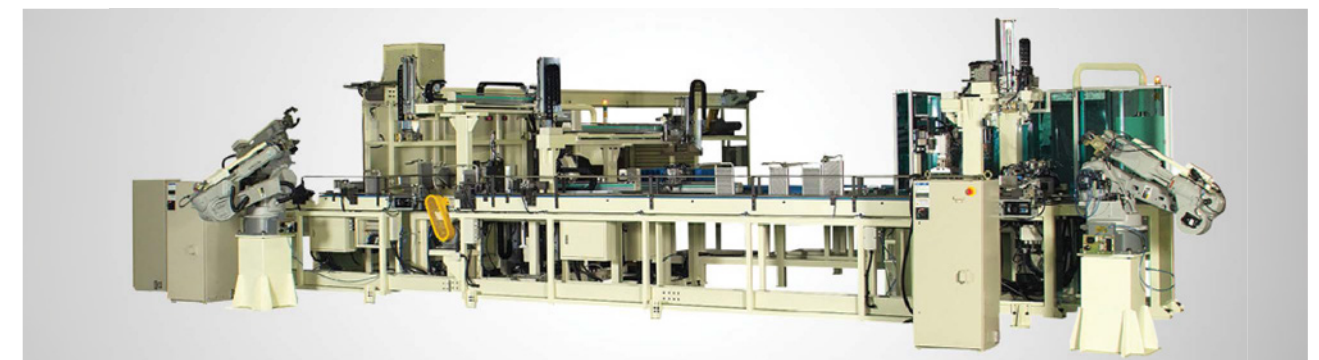
Heater Tank Assembly Line

- Cycle Time : 15 sec/1core
- Assembled the Heater Core and Tank



Core Air-Leak Test System

- Cycle Time : 12 sec/1core
- The equipment helps to separate the fixture out of core and move to proof test and air leak test process.



Core Sealing Machine

- Cycle Time : 14 sec/1core
- The equipment attaches the seal and transfer the goods



Radiator Tank & Gasket Assembly Line

- Cycle Time : 15 sec/1core
- The equipment assembles the tube, gasket seal, radiator tank for producing the radiator



PLANT HISTORY

HANATECH
Worldwide Plant Construction Team

PLANT SALES HISTORY

We are informing you
the various of HANATECH

2017



■ BEHR (DBTS)

ITEM CAC Assembly Line (Fin Mill, Core Builder)
Q'ty 1 Set
COUNTRY CHINA

■ Hanon System (Halla Visteon)

ITEM H-VAC Assembly Line
Q'ty 8 Sets
COUNTRY MEXICO, CHINA, USA

■ DASAN DTS

ITEM Single Row Fin Mill
Q'ty 1 Set
COUNTRY KOREA

■ Doowon Climate Co., Ltd

ITEM Inner Fin Mill Machine
Q'ty 3 Sets
COUNTRY KOREA, CHINA

■ Liuzhou Songz

ITEM COND. Full Auto Assembly Line
(Fin Mill, Core Builder, Wire Bander)
Q'ty 4 Sets
COUNTRY KOREA, CHINA

■ Hangzhou Sanhua

ITEM EVAP. Full Auto Assembly Line
(Fin Mill, Core Builder, Wire Bander)
Q'ty 1 Set
COUNTRY MEXICO

■ Nanjing Xiezhong

ITEM Nanjing Xiezhong
Q'ty 4 Sets
COUNTRY MOROCO

PLANT SALES HISTORY

We are informing you
the various of HANATECH



2016

■ BEHR (DBTS)

ITEM CAC FIN TOOLING
Q'ty 2 Sets
COUNTRY CHINA

■ Hanon System (Halla Visteon)

ITEM H-VAC Assembly Line
Q'ty 8 Sets
COUNTRY USA, CHINA, SLOVAKIA

■ Doowon Climate Co., Ltd

ITEM Form Roll For 2years contract
Q'ty 8 Sets
COUNTRY Whole world

■ Shanghai Songz

ITEM Cond. Fin Mill
Q'ty 4 Sets
COUNTRY CHINA

■ Air Internation

ITEM HTR. Assembly Line (Fin Mill, Core Builder)
Q'ty 3 Sets
COUNTRY CHINA

■ Hebei Ruifa

ITEM HTR. Assembly Line (Fin Mill, Core Builder)
Q'ty 1 Set
COUNTRY CHINA

■ KOHSAN

ITEM COND. Core Builder
Q'ty 3 Sets
COUNTRY THAILAND

■ Samsung Electronics Co., Ltd

ITEM PFC Form Roll & Core Builder
Q'ty 5 Sets
COUNTRY CHINA, THAILAND

■ Chongqing Songz

ITEM COND. Assembly Line
Q'ty 1 Set
COUNTRY CHINA

■ Naning Baling

ITEM INTERCOLLER Assembly Line
(Inner Fin Mill, Insert Machine,
Outer Fin Mill, Intercooler Core Builder)
Q'ty 1 Set
COUNTRY CHINA

2015

■ BEHR (DBTS)

ITEM RAD. Fin Mill & Core Builder Modification
Q'ty 1 Set
COUNTRY CHINA

■ Shanghai songz

ITEM COND. Full Auto Assembly Line
(Fin Mill, core Builder, Wire Bander)
Q'ty 3 Set
COUNTRY CHINA

■ Hanon System (Halla Visteon)

ITEM HTR. Core Builder
Q'ty 5 Sets
COUNTRY KOREA

■ Doowon Climate Co., Ltd

ITEM HTR. Fin Mill Machine
Q'ty 6 Sets
COUNTRY KOREA, CHINA

■ KDAC (Korea Delphi)

ITEM EVAP. Auto Core Builder Modification
Q'ty 3 Sets
COUNTRY KOREA

■ Tianjin Yaxing

ITEM HTR. Carbide Form Roll
Q'ty 4 Sets
COUNTRY CHINA

■ KOHSAN

ITEM COND. Fin Mill & Core Builder
Q'ty 1 Set
COUNTRY THAILAND

PLANT SALES HISTORY

We are informing you
the various of HANATECH



2014

■ **HVCC (Halla Visteon)**

ITEM HTR. Hi-Speed Auto Core Builder
Q'ty 3 Sets
COUNTRY MEXICO, SLOVAKIA

■ **DENSO Corp.**

ITEM Oil Cooler Assembly Machine
Q'ty 1 Set
COUNTRY U.K

■ **Yuxin**

ITEM Cond. Assembly Line
Q'ty 1 Set
COUNTRY CHINA

■ **Tianjin Yaxing**

ITEM HTR. Assembly Line
Q'ty 2 Sets
COUNTRY CHINA

■ **Doowon Climate Co., Ltd**

ITEM EVAP. Full Auto Assembly Line
(Fin Mill, Core Builder, Wire Bander)
Q'ty 4 Sets
COUNTRY KOREA, CHINA

■ **KB Auto Tech**

ITEM HTR. Tank Assembly Line &
Wire Banding Machine
Q'ty 1 Set
COUNTRY KOREA

2013

■ **Samsung Electronics Co., Ltd**

ITEM FME. Fin Mill
Q'ty 1 Set
COUNTRY CHINA

■ **Doowon Climate Co., Ltd**

ITEM Compressor Pulley Assembly Line
Q'ty 2 Sets
COUNTRY KOREA

■ **DAIHAN Climate Co., Ltd**

ITEM PFC. Core Builder
Q'ty 3 Sets
COUNTRY THAILAND

■ **Green Tech Co.,Ltd**

ITEM PFE&PFC Assembly Line
Q'ty 2 Sets
COUNTRY THAILAND

■ **HVCC (Halla Visteon)**

ITEM HTR. Core Builder
Q'ty 1 Set
COUNTRY KOREA

■ **KDAC (Korea Delphi)**

ITEM EVAP. Core Builder Modification
Q'ty 1 Set
COUNTRY KOREA

PATENTS AND CERTIFICATES

We are informing you
the various of HANATECH



Establishment of Suzhou Office in

R&D center certificate

business license

MAJOR CUSTOMERS

We will work together with our customers in
one heart.





www.hntcc.com

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